MOBILE BANKING AND CUSTOMER SATISFACTION

A CASE STUDY OF VODACOM TANZANIA

BY

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A RESEARCH DISSERTATION SUBMITTED TO KAMPALA INTERNATIONAL
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ADMINISTRATION

MAY 2012

DECLARATION

I RACHEL K MBISE hereby declare to the best of my knowledge that the work embodied in this research paper is my own work and has never been submitted for a degree or any academic award in any university or any institution of learning. It is in this regard that I declare this work originally mine and hereby present it in partial fulfillment of the requirement for the award of Bachelors Degree of International Business Administration of Kampala International University.

Literature and citation from other scholars' work has been fully referenced and acknowledged in the text and bibliography

RACHEL K MBISE

Sign: ....

Date: ...25/05/2012...

APPROVAL

This is to certify that the following research of RACHEL K MBISE has been carried out under the title "Mobile Banking and Customer performance the case of Vodacom Tanzania" under my supervision. It is now ready for submission to Kampala International University faculty of business management for the award of a Bachelor of International Business Administration degree, with my due approval

MR. RUTEGANDA MICHAEL

Sign: ....

Date: 25/05/12 ....

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DEDICATION

This special work is kindly dedicated to my father **Mr. Kaanankira E. Mbise** and my mother **Mrs. Myness Mbise**, my sisters **Stella Mbise** and **Irene Mbise** and I extend my appreciations to my best friend **Godson Ngoyai** for their advice, moral, financial and material support during my studies in Kampala International University.

MAY GOD BLESS YOU ABUNDANTLY!

ACKNOWLEDGEMENT

ABSTRACT

The research topic, "Mobile Banking and Customer performance" A case of Vodacom Tanzania." The main objectives of the study included.

To examine the challenges faced by mobile banking end- users

To determine the end users views on the current mobile banking as compared to other traditional money transfer systems such as Western union, ATM and others.

To identify the challenges the users face and the their views and perspective on the future mobile banking

To come up with suggestions and proposals on how to reduce this problems

The literature review presents works of other scholars on areas of Information and Communication Technology and Banking. The literature review is organized in such a way that it correlates with the objectives of the study and gives an insight into what researcher has done in as far as answering the research questions.

The study area deception and methodology o the study offers a concise discussion of the methodological aspects used in the study looking to how various tools were used to collect data from respondents as well as way in which all the information collected was processed, analyzed and presented discussed and so on .

The presentation and discussion of the findings is around the themes relating to the objectives, variables and research questions of the study. Here the challenges facing mobile banking end users were discussed. Finally the conclusions focus on the references from the research and answers to the research questions are briefly discussed in this area.

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CHAPTER ONE

1.0 Introduction

The prolific growth of mobile banking has completely transformed the nature of banking business and the manner in which businesses are carrying out their transactions in Tanzania. Not only have new models emerged but more importantly traditional money transfer system are now more efficient and available by a click on the phone button .In Tanzania, mobile banking has been implemented successfully by telecommunications industry and in particular mobile phone service providers. This has been achieved by the introduction of Vodacom's M-PESA, TIGO PESA and Airtel's Airtel Money mobile banking services (Tanzania).

With the trend rising, there are various challenges that have risen from the mobile banking industry in Tanzania. The research aims at identifying the user's view of mobile banking and identifying the challenges users face .The researcher will use Vodacom's MPESA money transfer system as the case study during the research.

MPESA is a mobile banking service that has approximately 30 million users in Tanzania. Various complain have been raised about the service being unreliable among other problems that formed the basis for the research.

The research proposal entails the background to the study; statement of the problem; the objectives of the study; the research questions; the importance of the study; the limitation of the study; the literature review and research methodology.

1.1 Background information

Since its launch by the end of the year 2007, millions of shillings have been transacted using the MPESA money transfer system. According to Vodacom's statistics, it is estimated that 25 trillion Tanzania shillings have been transacted using the MPESA and approximately 30 billion shilling is transacted everyday using their service.

Today the more than 7,000 M-PESA agents serving a country of 39 million Tanzanians and customer base of 6 million far exceed the 887 bank branches and 1435 automatic teller machines (ATMs) in Tanzania. As of the end of February 2009, the monthly value of person-to-person money transfers was TZSH 14.5 billion, with the cumulative value of these money transfers since M-PESA's launch reaching TZSH 118 billion(The Gurdian,2009).

MPESA being one of the company's major asset and income provider has led the company to invest heavily on the network infrastructure, financial security and the expansion of their services to most parts of the country.

The company has also introduced other products (such as the internet surfing) to meet their customers' demands. Although this can be counted as a big success, customers, who are their bosses, feel that the company has done little to minimize and reduce the challenges that have come as a result of operational difficulties and transactional problems. These challenges might have a negative influence on the future mobile banking in Tanzania. Hence there is need to research and find out what the real issues are and how they can be handled to ensure the future of mobile banking in Tanzania.

Vodacom has carried out many on its financial research .Few concern have been made to identify customers experiences and problems. Many of the problems (for example the operational problem where users might have sent money to wrong numbers) are still being experienced. What impact does this have on the future mobile phone banking or money transfer system? What do the customers feel about these/ are they still going to remain loyal to the company? It has taken long before measures and hence the need for these research.

1.2 Statement of the problem
The mobile money transfer system consumer faces challenges that if not handled appropriately may have a negative implication in the future of mobile banking in Tanzania. For example, there have reported cases where users have sent money to wrong number and they can retrieve their money back. This may create a phobia of using the future mobile banking services.

Vodacom company has placed more emphasis on the financial process of their services of late little effort has been put to handle the customer complaints.

According to Sarah (2005), organizations that provide standard service, irrespective of customer's needs and complaints, are in danger because customers may form the impression that they are just account numbers and not individuals.

There is therefore the need to identify the challenges that the users face and in turn come up with proposed solutions that will mitigate the existing problems.

There is therefore need to understand this challenges and solve them because if they are neglected they might create a negative impression on the future mobile banking users.

1.3 Objective of the study

1. To examine the challenges faced by mobile banking end- users
2. To determine the end users views on the current mobile banking as compared to other traditional money transfer systems such as Western union, ATM and others.
3. To identify the challenges the users face and the their views and perspective on the future mobile banking
4. To come up with suggestions and proposals on how to reduce this problems

1.4 Research questions

1. What is the general view of end-users in mobile banking as compared to other money transfer systems in Tanzania and what are the user's perspectives on the future mobile banking?
2. What are the operation difficulties users' faces when using the current money transfer system?
3. What should be done to mitigate these problems and what framework should be adopted?

1.5 Importance of the Study

There has been a tremendous growth in mobile banking not only in Tanzania but all over the world. The emergence of mobile banking has resulted to the development of various business models which points out clearly the world is moving towards adopting mobile banking services as opposed to the use of traditional Personal computers. This advancement in Technology has also given rise to some underlying problems that need to be identified and mitigated.

Since one of the objectives of the study is to identify the end users challenges and their views on mobile banking , the study will help to come up with the proposed solutions and framework that if implemented will ensure reduction in end user challenges .

The findings of the study were of great importance to the current and future mobile banking service providers since it will point out to what needs to be in place before implementation of the services.

1.6 The scope of the research

The study focused on identification of the challenges customers face and how these challenges may negatively have impacts the current and future mobile banking. This was carried out for academic purposes but its results and findings will be applied in the mobile telecommunication industry and the government in implementing the economic goals of Tanzania.

1.7 Conceptual frame work

The conceptual framework shows diagrammatically the relationship between the different variables in the study. The independent variables are the trends in mobile banking technology and the technology behind the mobile banking, while as the importance of appropriate customer care on Mobile banking and its influence in determining view of user's in the future mobile banking are perceived as the dependent variable. More so, the researcher will identify the Intervening variable that also affects the outcome of the study.

Figure 1: Conceptual frame work

Independent Variable   Dependent Variable

The trend in cell phone technology and mobile banking
   • IVR (Interactive Voice Response)
   • SMS (Short Messaging Services)
   • WAP (Wireless Access Protocol)
   • Standalone Mobile Application Clients

The importance of appropriate customer care on Mobile banking
   • The importance of handling customer complaints
   • The mobile banking business models
   • Mobile Transactions

Intervening variable

The government efforts on Embracing ICT in Tanzania   • The government's initiative in regulating mobile banking in Tanzania

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CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The focus of this chapter was to determine what was done already in the mobile banking field and to integrate, summarize and what was known in the field of mobile banking.

The first section focused on the trends in mobile banking technology and the technology behind the mobile banking. The second section explored the importance of appropriate customer care on Mobile banking and its influence in determining view of user's in the future mobile banking. Finally, the fourth section is based on the government's initiatives towards embracing mobile banking in Tanzania and its effort on establishing regulatory bodies for mobile banking.

2.1 The Trend in Cell Phone Technology and Mobile Banking

Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and is still growing at rapid pace. According to the GSM Association and Ovum, the number of mobile subscribers exceeded 2 billion in September 2005, and now exceeds 2.5 billion (GSM, 2010).

The large number of mobile phone consumers has led to the development of new way of banking in the world .this can be witnessed by the success of the MPESA money transfer system in Tanzania. The Panos Institute (2004) report also states that mobile phones have greatly simplified the provision of services.

According to Herzberg (2000), the number of mobile phone users has increased rapidly in the past decade. This has led to developers investigating on more convenient methods for bank customers to perform financial transactions. This has in turn has resulted to the introduction of mobile banking. Herzberg goes on stating that the usages of mobile banking are predicted to increase as the number of cellular phone users are increasing and mobile usage are foreseen to revolutionize payment banking for industries worldwide.

On the other hand, the Gemalto Company (a leading mobile phone manufacturer) also points out that People living in emerging markets that don't have a bank account or a computer still often own a mobile phone, which can provide them with access to basic financial services. The company also indicates that cellular phones represent a cost-effective solution for users such as financial institutions and operators and hence allowing them to bridge the digital divide in places where traditional banking and Internet services are too expensive or simply nonexistent(Gemalto, 2009).

The technological trend is therefore drastically moving from PC to mobile phones. With the emergence of this new technology, various models and security architectures have been developed to ensure secure and efficient money transfer systems. Newer versions of security protocols have been developed to make the system resilient to attacks such as fraud. Some of the technology that has been deployed in this channel include; the WAP (Wireless Application Protocol) over GPRS (General Packet Radio Service) and SMS (Short Message Service) using the WIG (Wireless Internet Gateway).

According to Hertzberg (2000), the mobile transaction architecture consists of three main components i.e. the user, the device and the mobile transaction provider.
The user is the client who is requesting for the service, the device is the mobile device which connects the client and the service provider through the wireless network, and the mobile transaction provider could be a cellular operator, a bank or a combination of both.
INFOGILE Company argues the same concepts but in a different perspective. According to the company, Mobile Banking is being deployed using mobile applications developed on one of the following four channels (INFOGILE, 2007)

> 1. IVR (Interactive Voice Response)
>
> 2. SMS (Short Messaging Service)
>
> 3. WAP (Wireless Access Protocol)
>
> 4. Standalone Mobile Application Clients

2.2.1. IVR – Interactive Voice Response

IVR or Interactive Voice Response service operates through pre-specified numbers that banks advertise to their customers. Customer's make a call at the IVR number and are usually greeted by a stored electronic message followed by a menu of different options. Customers can choose options by pressing the corresponding number in their keypads, and are then read out the corresponding information, mostly using a text to speech program.

Mobile banking based on IVR has some major limitations that they can be used only for enquiry based services. Also, IVR is more expensive as compared to other channels as it involves making a voice call which is generally more expensive than sending an SMS or making data transfer (as in WAP or Standalone clients).

One way to enable IVR is by deploying a PBX (Public Branch Exchange) system that can host IVR dial plans.

Banks looking to go the low cost way should consider evaluating Asterisk, which is an open source Linux PBX system

2.2.2 SMS – Short Messaging Service

The company explains that SMS uses the popular text-messaging standard to enable mobile application based banking. The way this works is that the customer requests for information by sending an SMS containing a service command to a pre-specified number. The bank responds with a reply SMS containing the specific information.

One of the major reasons that transaction based services have not taken off on SMS is because of concerns about security. The main advantage of deploying mobile applications over SMS is that almost all mobile phones are SMS enabled. An SMS based service is hosted on a SMS gateway that further connects to the Mobile service providers SMS Centre. There are a couple of hosted IP based SMS gateways available in the market and also some open source ones like Kennel.

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2.2.3 WAP – Wireless Access Protocol

WAP uses a concept similar to that used in Internet banking. Banks maintain WAP sites which customer's access using a WAP compatible browser on their mobile phones. WAP sites offer the familiar form based interface and can also implement security quite effectively.

The banks customers can now have an anytime, anywhere access to a secure reliable service that allows them to access all enquiry and transaction based services and also more complex transaction like trade in securities through their phone.

A WAP based service requires hosting a WAP gateway. Mobile Application users access the bank's site through the WAP gateway to carry out transactions, much like internet users access a web portal for accessing the banks services.

The following figure demonstrates the framework for enabling mobile applications over WAP. The actually forms that go into a mobile application are stored on a WAP server, and served on demand. The WAP Gateway forms an access point to the internet from the mobile network.

2.2.4 Standalone Mobile Application Clients

Standalone mobile applications are the ones that hold out the most promise as they are most suitable to implement complex banking transactions like trading in securities. They can be easily customized according to the user interface complexity supported by the mobile. In addition, mobile applications enable the implementation of a very secure and reliable channel of communication.

One requirement of mobile applications clients is that they require to be downloaded on the client device before they can be used, which further requires the mobile device to support one of the many development environments like J2ME. J2ME is fast becoming an industry standard to deploy mobile applications and requires the mobile phone to support java.

There are also other models that mobile banking uses. These models vary from depending on the nature and the relationship of the parties involved.

2.3 The mobile banking business models

Mobile banking in Tanzania is fast moving away from brick and mortar as more customers embrace m-money services (Zachari, 2010). As a result, there has been a tremendous change in business models and banking models. These models differ primarily on the question that who will establish the relationship (account opening, deposit taking, lending etc.) with the end customer, the Bank or the Non-bank/Telecommunication Company (Telco). Models of branchless banking can be classified into three broad categories - Bank Focused, Bank-Led and Non Bank-Led.

2.3.1 Mobile Transactions

There are a number of mobile transaction initiatives in the developed and developing world. Most are bank-led and largely provide an information and transaction channel which complements existing bank access channels such as branches, telephone banking and online services (Ron et al, 2002). There are, however, significant examples of innovative mobile transaction schemes that hint at a radical transformation of the financial market landscape in that the business model addresses those without existing bank accounts. Examples which are often cited include Wizzit in South Africa, Globe in the Philippines and M-PESA in Tanzania.

According to Gemalto Company (Gemalto, 2009) there are mobile financial transaction models which make innovative use of existing widely-diffused financial service platforms, such as Visa, in order to deliver transaction services to under- served market segments. Interestingly, the most innovative of these mobile banking models, and those with the greatest potential to bring significant benefits to consumers, are those addressing the needs of developing markets, which hitherto have been the most complex in which to increase access to finance.

In both types of approach – mobile transactions as a brand new access channel and as an innovative alternative banking system – the rapidly-growing mobile communications infrastructure and its associated support services (for example, air time agents) provide the possibility of outreach vastly beyond traditional banking networks and at significantly lower costs(Ron et al ,2002)

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In order to explore the nature of mobile financial transaction systems in more detail, three examples are described below.

Each attempts to provide a system that allows a customer to put cash in and take it out, and also make money transfers to other individuals and entities. Each system, however, is optimized for particular purposes and thus there are significant practical differences between the systems and the user experience. At their core, each of the schemes described offers four basic services.

How these services are offered and charged to the consumer varies. The four core services are: Information – for example account balance retrieval, transactional history of deposits and withdrawals; Transactions – for example, transfer of funds between accounts; Cash-in and cash-out services – the deposit and withdrawal of cash; Payments – a variety of mobile payment applications, such as air-time top-ups, electricity meter top-ups and in some markets broader services such as m-payments at vending machines.

The differences between the schemes can also be described in terms of the broader system characteristics which may be less transparent to consumers. The systems vary in terms of: their technical platform; who manages the money float and settlement mechanisms; who manages the interaction with a customer and how; and whose brand is used to market the product. These broader characteristics fall into the following categories: open or closed systems, interoperability, identity of the deposit holder, tariff structures for consumers, regulatory compliance and mechanisms for deposit making, transfers and cash withdrawal.

Open or closed system – the extent to which a specific mobile scheme allows transactions and/or payments to any account in any other network. The ability to effectively interconnect with the existing bank clearing systems and money transfer networks (such as Visa), and the terms and conditions of this interconnection regime, is a critical aspect of the design and operation of a mobile banking scheme.

In effect this interconnection regime defines the nature and extent of the network externalities, and their distribution.

Interoperability – the technological design of the system and its functionality. The key issue is whether or not the mobile scheme is essentially a proprietary system embedded in the network, equipment and operations of an existing mobile operator or instead stands free of any particular network. Is the service tied to one mobile network operator or is it network-independent?

Identity of the deposit holder – are deposits made by customers held in individual deposits at a licensed deposit taking institutions (a traditional bank) or are they instead held as nominated elements of a pooled account (which itself might or might not be directly held at a licensed deposit taking institution).

2.4 The importance of handling customer complaints

As the number of mobile phone consumers increases so does the need for the customers good care. In addition to that as the power of the customer's increases, customers are becoming more vocal in expressing their dissatisfaction. Sarah (2005) argues that as the majority of customers still do not complain those that do complain give the company both valuable insight and the opportunity to rescue the situation. She also argues that many organizations still do not actively encourage complaints.

Much focus has been on the technology and little or no attention has been given to the users of the mobile phone technology. As pointed out by Kathy (2007) in today's competitive business environment, if you don't take care of your customers, someone else will.

Therefore Mobile phone service providers looking to attract and retain loyal customers have to constantly improve their level of service provision and customer relationship.

Customers are important part of any organization that offers either products or services. They determine the failure or success of any business or organization. The success of any firm can therefore be measured with how well they meet their customers' needs and how well they handle their customers. Michael porter (1980) argues that, those companies that have identified the needs of their customers and have put on strategies to meet their customers' needs always enjoy

the competitive advantage and large market share. He goes on arguing that those companies are also able to lock in their customers.

Most organizations place more emphasis on the financial input and output of their service or their businesses and normally take long to solve their customer complaints. The money transfer system has not been left out either in this.

Over the past years the consumer mobile market has matured and the various stakeholders seem to have taken an interest and realized the potential value of the high penetration in mobile phones amongst their respective customer bases.

The market expansion has brought with it the need for a mechanism that identifies and solves the customer problems. In her book, *customer capitalism*, Sandra (2005), professor of Economics at Imperial College, London, she argues that today's successful companies will sustain competitive advantage through fundamentally transforming their business rather than maintaining their status quo.

These transformation mechanisms means more than just providing 'cool' technologies .it goes beyond the security of the services that are provided but it's based on good relationship between the company and their customers.

Still in her book, Sarah (2005) elaborates that the social interchange between the customer and service provider and the way this process is managed is pivotal to achieving excellent customer service.

2.5 The government efforts on Embracing ICT in Tanzania

The government of Tanzania aims at making Tanzania an ICT hub by the end of the focuses on year 2030. With the introduction of ICT pack, the country is expected to embrace new technology which is shifting from PC to mobile phone.

The government has therefore focused on the rural areas where it aims at improving the infrastructure and the view of people on embracing technology.

Studies maintain that positive approaches towards the role of ICTs in development in fact have an impact on the standards of living and on poverty alleviation at various community levels (Marker et al 2002).

On the other hand, Mudhai (2004) observes that the government of Tanzania is working towards establishing a master plan for e-commerce, and e-government strategies to make public administration more transparent, efficient and democratic. The author observes that the Government of Tanzania plans to spend US$ 5.85 billion (TzSh 9.36 trillion) by 2015 on: 1.4 billion fixed telephone lines in the rural areas. This is translated to mean an average of 5 lines per 100 people, up from 1.6 per 100.2.4 million fixed telephone lines in urban areas. This translates to mean an average of 20 lines by 100, up from 4 per 100.

2.5.1 The government's initiative in regulating mobile banking in Tanzania

The government of Tanzania has established regulatory bodies that govern both the communication and the banking sectors. These include the TCRA and The BOT. There has been concern about how the mobile banking service of MPESA should be governed. Banks complained that the MPESA service is a banking system while the TCRA still held on it as a communication target.

The government is currently working on a framework that will control and handle issues with the mobile banking system.

According to the bill that was drafted and submitted to the attorney General of Tanzania, the central bank act has a broad statement about the oversight of the national payment system, but the proposed national payment system Act will give BOT more oversight and authority over all payment systems. This would include M-payment such as MPESA. If a system becomes systematically important, BOT intends to set the requirements such as security standards and minimum deposits.

The Tanzania ICT Policy of March 2006 (TIC, 2006) aims to promote e-commerce and other eservices such as mobile banking. E-commerce services assume that users are part of the networked world, at least during the e-commerce transactions. Since the majority of Tanzanians

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access the networked world using their mobile handsets, then mobile commerce is expected to be the dominant e-commerce service in Tanzania.

As I have described in earlier sections, there are emerging mobile commerce and mobile banking services in Tanzania. However, it is not clear that such mobile commerce services are influenced in any way by the Tanzania ICT policy statements. It is possible that mobile commerce services are driven by entrepreneurial and business opportunities arising from the high mobile teledensity of mobile phones estimated at 30%.

The growth in the mobile sector has been made possible by the regulatory environment created by the Tanzania Communications Act of 1998 (TCA, 1998) as described above.

Unfortunately, TCA 1998 only regulates communications services and does not address issues of e-commerce or mobile commerce transactions and mobile banking.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research methodology employed in the execution of this study. It specifies the design, sampling method as well as data collection procedures and instruments that were employed in the research.

3.1 Research design

The study adopted a descriptive research design .This involved a field study where the target population described their view on the current mobile banking services and the challenges that they face while using the MPESA service.

The researcher opted for descriptive research because it helped in describing the characteristics of MPESA users and help to determine the frequency of the occurrences of the problems and the challenges that end users face.

3.2 Target population

The population of this study comprised of users of using the MPESA system, the MPESA Agents around POSTA, along Ohio Street next to Institute Of Financial Management. The research focused on this population because of they interact with the MPESA system and they are much more familiar with the problems that they face. The MPESA agents were be targeted because of the customer services that they provide. Thirty students from Institute of Advanced were also targeted because of their technological background in information technology.

3.3 Sampling design

The researcher employed purposive sampling. This method was employed because of its ability to allow the researcher to deliberately select particular users (in this case MPESA users).The sample population therefore comprised twenty MPESA users along the along Ohio Street, five small business owners in the same location, two MPESA Agents along the along Ohio Street and twenty students of Institute Of Financial Management.

3.4 Data collection procedure and instruments

Data was collected using self-administered questionnaire. In order to solicit uniform data from the respondent, similar questions were included in the questionnaire. The researcher used self administered questionnaire because of the flexibility in terms of time. The questionnaires contained both closed and open ended questions seeking items that met the research objectives and answer the research questions.

3.5 Data analysis and presentation

Data was analyzed through descriptive statistic and correlation of Microsoft Excel 2003 data analysis tool. The researcher opted for Microsoft excel he is well versed with the software and it is readily available as compared to other statistical software such as SPSS.

3.6 Limitation of the study

The researcher did all that is possible to bring this research to a successful conclusion. However some factors which limited data collection from the sampled population. To begin with, the study depended on the cooperation of the respondent but the researcher encountered respondents who are hesitant to give true answers in the questionnaires. Secondly study required many resources in preparing for data collection, the analysis and reporting the findings.

CHAPTER FOUR

PRESENTATION, DATA ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter of this chapter is to show how data was analyzed by the researcher. It focuses on the method that was applied during the analysis of the result.

A total of 47 questionnaires were issued at various points out of these, 39 were completed and returned .However, 8 out of the questionnaires were not returned.

In summary the response rate of the survey was 83%. Out of the 39 respondents, 20(51%) were students from IAT, 15(38.46%) were Mpesa users (passersby) and 4(0.64%) were Mpesa Agents.

4.1 Respondents according to age

Table: 4.1

Age Of Respondents	Frequency (f)	Percentage (%)
18 to 24	25	64%
25 to 31	10	26%
32 to 38	3	7%
39 and above	1	3%
Total	39	100%

Source: Primary Data

From the above table 64% of the respondents are between the ages of 18 – 24 years, 26% are between the ages of 25 – 31 years, 7% are between 32 – 38 years and 3% are above 39 years. This is graphically represented as below;
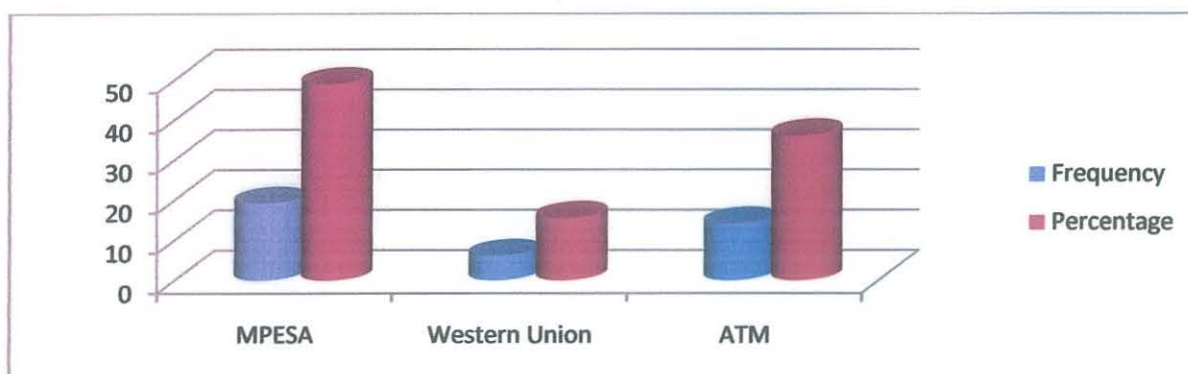
Figure 4.1
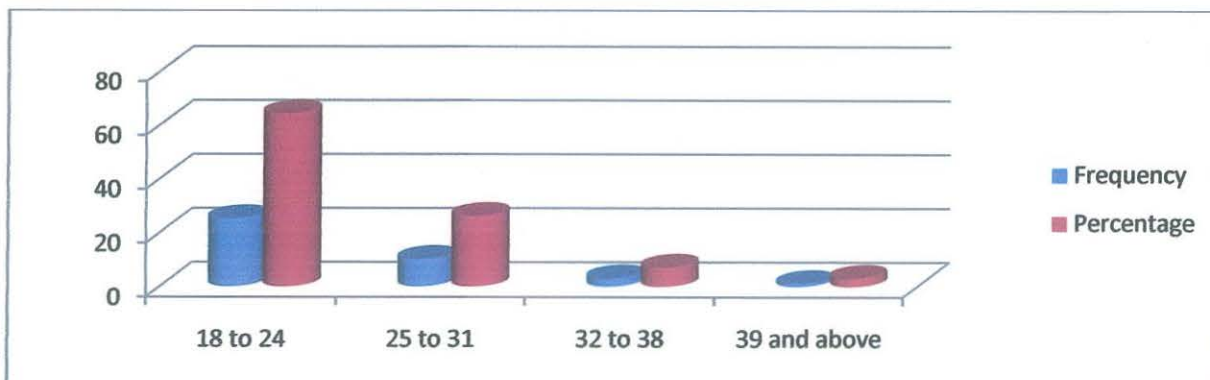
These results were presented in the graphical format as shown below.

Graph 1. Graphical representation of convenience level on the current Mpesa service verses other services

Source: researcher 2011

However, the researcher found out that users 25(64.10%) preferred the use of ATM because of the good customer and customer response that they receive from their various banks. The Mpesa service had the lowest rating as compared to the other two service providers in terms of customer care, this was represented by 11(28.20%) . The results depicted the need for proper customer and fast response to customer complaints.

Graph 2: graphical representation of customer care perception on the current Mpesa service verses other services
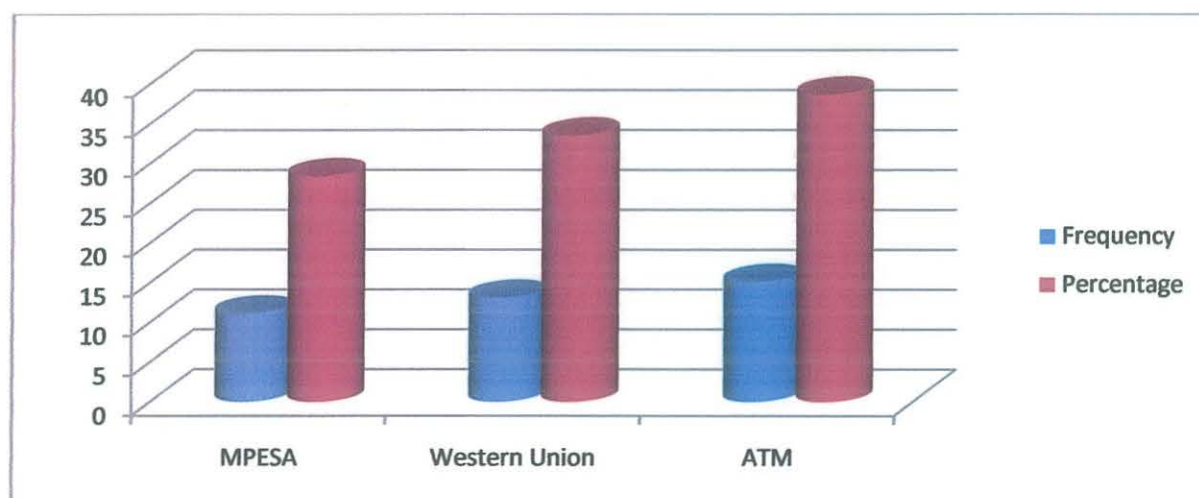
Source: researcher 2011

4.6 The problem users face while using the MPESA service

The researcher sought to find out the problems that end users face. The problems were categorized and analyzed as follows: sending money to wrong number forgot pin number, can't extract number, service unavailable (Delays), other problems =6. The following table shows the magnitude of the problems.

Table 2: problems users face while using the MPESA service

Problem experienced	Respondents number	Percentage	Magnitude
Sending money to wrong number	5	12.82%	3
Forgot pin	2	5.12%	2
Service unavailable(Delays)	29	74.35%	4
Operational problem e.g. Extraction of numbers	36	92.3%	3
Cash recovery problems due to sending money to wrong numbers	5	12.82%	5
Poor response to customer inquiries	18	46.15%	5
Security problems	13	33.3%	2
Transactional problems(the amount of charges)	29	74.35%	1

Source: researcher 2011

The results showed that unreliability of the MPESA service was one of the setbacks and problems that users experienced .this number was represented by 29(74.23%).However the remaining 10(25.65%) did not view this big problem. One of the respondents gave an example of the case whereby his wife was sick and he could not withdraw cash to take her to the hospital because the service was unavailable.

The researcher also found out that only 5(12.82%) of the respondent had sent cash to wrong number and they could not retrieve It back .The findings revealed that the cause on this problem was due to the inability of users to scroll numbers from their phone books.

The problem can also be attributed to the fact that the current software application running on the MPESA service does not give the room for scrolling numbers from the phone book.

The above problem was closely associated with the case of users forgetting their pin numbers. 2(5.12%) respondents consented that they had forgotten their numbers two to three times. On the other hand 13(33.33%) of users had received messages prompting them to submit their pin number .The remaining 24(61.53%) had not forgotten their pins nor experienced this problem. However, the respondents consented that there is need for training the Mpesa users on the importance of not disclosing their pin number.

The study also revealed that, the transaction fees of the service and the maximum amount of money that can be sent through Mpesa was not a major problem 29(74.35%) of the users felt that the transactional fees was affordable and therefore they would continue to use the service. However, the remaining 10(24.65) elaborated the need for extending the maximum amount of money that could be sent via Mpesa. The maximum amount of money that could be transacted using the service was TSH. 900,000 as at the time that the research was carried out.

The study found out that Security concerns the agents and Mpesa users was a slight problem.5(12.82%) of users however explained the need to have security personal at every agents point in order to ensure the customers and Mpesa agents security .

From the above finding, research question 2 which sought to find out the problems that end users face while using the Mpesa service was answered.

CHAPTER FIVE

SUMMARY, RECOMMENDATION, CONCLUSIONS

5.0 SUMMARY

The purpose of this study was to determine the perception of users on the current and future mobile banking and also to identify the problems end users face while using the Mpesa service. It also focused on determining whether the current problems may have a negative impact on future mobile banking.

5.1 CONCLUSION

In summary, the response rate was of the survey was 82.9%. The objective of the study was to identify the challenges that the end-users face with the current mobile banking system and whether the problems that are encountered by the users can change their views on the future mobile banking.

For objective one, the study revealed that the Mpesa banking system has gained a greater popularity in Tanzania when compared to other traditional money transfer system. This is as a result of the service being the most convenient method of sending and receiving money. The convenience level was at 48.72% and these could be attributed to the available number of the Mpesa agents.

For objective two, the study revealed that users generally faced three kinds of problems. The first category is the interoperability problems where users can not scroll the numbers from their phone books leading some of the users to send money to wrong numbers. This category also includes the incapability of users to reverse transaction once they have sent money to wrong numbers. In addition to that, users experience problems with the services being unavailable .the level of unreliability stands at 74.35%.

The second category of the problems that users face is based on the response to customer inquiries and complains .the research found out that users rated the MPESA customer care service the least at 28.21% as compared to other services such as western union (33.33%) and ATM (38.46). 29 out of 39 respondents consented that the Vodacom company needs to improve on its customers care and the way they respond to their customers complaints.

5.2 RECOMMENDATIONS

The researcher would like to recommend the following action that needs to be taken to ensure that the end-users challenges are mitigated and the users' perception of future mobile banking remains positive.

5.2.1 Improved customer care to change users' perception

To begin with, mobile banking is gaining a strong background in the Tanzanian society; there is therefore a need for service providers to offer better customer care in order to maintain the perception of users on the current and future mobile banking.
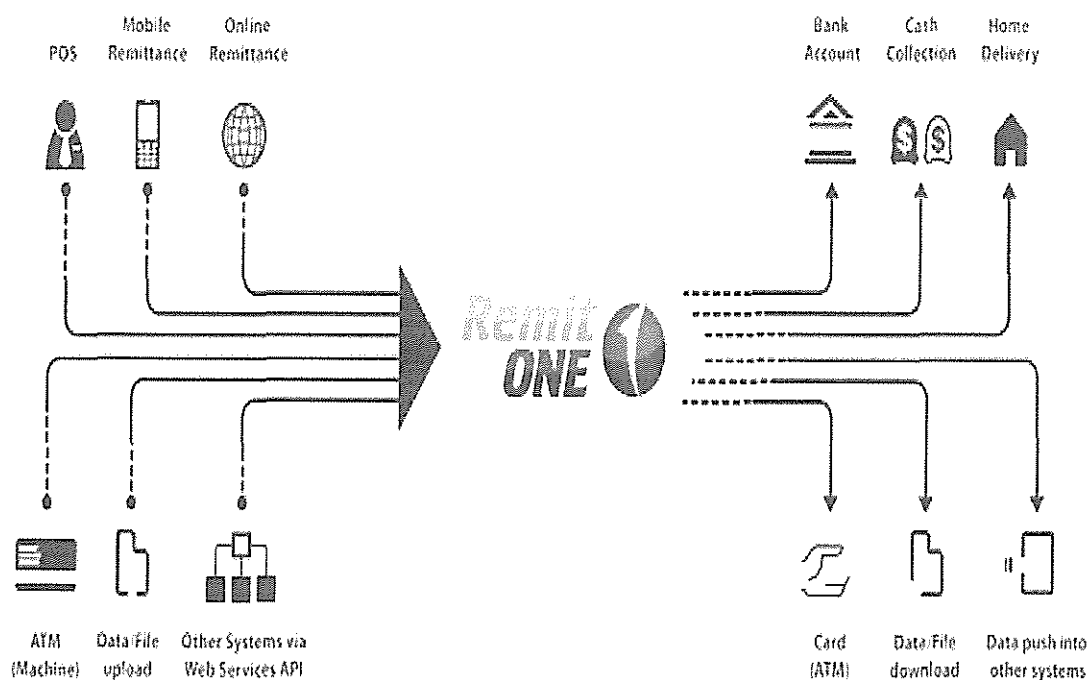
5.2.2 Proposed solution to handle end user problems

Since most of the problems that end users face result from the interoperability of the current software application running the Mpesa service, the researcher would like to recommend an adoption of a new improved version of the Mpesa system that will run on the clients' handsets. The company could adopt a Money Transfer Management Solution (MTMS) such as the one offered by Remit One Company in the United Kingdom .The MTMS Software can be customized to meet the local Tanzanian Market and need. The software provides additional functionalities that allow users to scroll the names from their phone books and confirm their transactions. MTMS provides an easy to use interface that can be used by any user with or without any computer experience

The MTMS framework also ensures reliability of the network since it brings with it the infrastructure that ensures bandwidth flow. In order keep track of accounts, MTMS has built in account payable and account receivable module. Using this module, MTS allows entering payment and tracking the payments that end users have made via the agents.

See the diagram below.

Figure 3. Mobile Money Transfer Management system

| POS | Mobile Remittance | Online Remittance | | Bank Account | Cash Collection | Home Delivery |

| ATM (Machine) | Data File upload | Other Systems via Web Services API | | Card (ATM) | Data/File download | Data push into other systems |

Source: http://www.sendmoneyhome.org/Content/remitone.php

5.2.3 The need for government support in the current and future mobile banking in initiative in Tanzania

The researcher would stress that the government of Tanzania needs to sensitize the Tanzanian population on the importance of mobile banking in achieving economic goals. Apart from establishing the regulatory bodies such as TCRA, the government also needs to work closely with the service providers in ensuring that quality service is offered.

The researcher would also like to recommend further studies on the subject based on the following: Firstly, the study was biased because it only included samples from along Ohio Street in Arusha. Secondly, the study did not dig into the details of the cultural impact of the m-banking technology which therefore can be grounds for related research.

APPENDICES

APPENDIX I

QUESTIONNAIRE

I am student pursuing a bachelor degree in international business administration. I'm carrying out a research on the topic "Mobile Banking and Customer Satisfaction" .The research is conducted in the fulfillment for the award of bachelor degree in international business administration. I hereby request for your contribution to this study to enable my successful completion of this course. Your response will be confidential and strictly for academic purposes.

SECTION A

PERSONAL DATA

Please tick in the box

1. AGE (years)

18-24 ☐   25-45 ☐

31-37 ☐   38 and above ☐

2. GENDER

(a)Male ☐   (b) Female ☐

3. LEVEL OF EDUCATION

Primary level ☐   Secondary level ☐   Certificate level ☐

Diploma level ☐   Degree level ☐   Other ☐

4. WORKING EXPERIENCE (YEARS)

1 to 2 ☐   2 to 5 ☐

6 to 9 ☐   10 and above ☐

SECTION B

5. What is the perception of users on the current mobile banking systems in Tanzania in terms of Convenience and customer care service? (PLEASE TICK)

Services	Convenience Level	Customer care level
MPESA		
Western Union		
ATM		

6. What arte the problem users face while using the MPESA service? Use the scale in Table 1. Below ranges from: 1=Not a problem, 2=Slight problem, 3=Problem, 4=Big Problem, 5=Major Problem.(PLEASE TICK)

Problem experienced/ Scale	1	2	3	4	5
Sending money to wrong number					
Forgot pin					
Service unavailable(Delays)					
Operational problem e.g. Extraction of numbers					
Cash recovery problems due to sending money to wrong numbers					
Poor response to customer inquiries					
Security problems					
Transactional problems(the amount of charges)					

THANK YOU